

Issues in Modeling Green Power

4th Renewable Energy Modeling Summit

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Scope Issues

- ◆ Which forms of power are included under “Green?”
 - What is the definition of “green power”
- ◆ Does GP need to be modeled over the long term, or is it simply a transition strategy?
 - What might kill GP programs – competitiveness improvement, e.g., climate change, breakthrough
- ◆ What are the decisions and decision-makers that need to be modeled?
 - Consumer
 - Supplier
 - Equipment manufacturer

Capabilities Issues

- ◆ To assess the impact of GP, how critical is accurate modeling of “learning”
- ◆ Do the models need to capture variations in attitudes and “willingness-to-pay” regionally and over time?
- ◆ Why do we think we can model this non-economic phenomenon when we have not succeeded in capturing most others?
 - How accurate have past modeling attempts for GP been?
 - Should the GP modeling be exogenous to the energy model?

Data Issues

- ◆ What is the current “willingness-to-pay”
 - Survey
 - Actual purchases
- ◆ How much GP is currently being purchased and what are the future trends?
 - By technology

Review of GP Modeling Issues

- ◆ What's included under GP?
- ◆ Is GP for the long term?
- ◆ What decisions should be modeled?
- ◆ What “learning” should be modeled?
- ◆ Modeling variation over time and regions
- ◆ How successful will modeling GP be?
- ◆ Data: what are people buying/paying?